servations should serve to induce some of our professional brethren to test its efficacy. Should any of them do so, we should be pleased to receive the results of their experience."

Singular condition of the Knee Joint in a New-born Infant.—Dr. D. H. Bard, of Troy, Vermont, has communicated to our cotemporary, the *Boston Medical and Surgical Journal,* (26th November, 1834,) a remarkable case, in a new-born infant, in which "the leg turned up forward on the thigh, the bottom of the foot presenting directly forward, the toes turned toward the face of the child, and the heel from it." The attendants were not aware of any injury being sustained during the delivery, which had been natural, and accomplished by the unaided efforts of nature. Dr. B. found that on drawing the leg gradually and gently towards himself, it immediately assumed its natural position and shape; but when left to itself, it began directly to move upward; the knee flattened upon the top; swelled out a little beneath, but none on either side. When the leg had arrived at about a right angle with the thigh, its motion became more rapid, till it was checked by the clothes, or the integuments of the lower part of the thigh and upper part of the leg. It was easily drawn back; and when the leg had arrived at nearly a right angle with the thigh, the amount of force required to carry on the motion was still less, and continued to diminish until the limb became straight. Flexion of the leg upon the thigh was performed with the usual ease. No motion of the limb appeared to give the child pain. The limb was confined in a proper position by bandages, for a short time, and the leg did not afterwards show any inclination to return to its unnatural situation. The child did well, and when it began to use its legs, no difference could be discovered between them.

Urea, Benzoic Acid, and Xanthic Oxide, in Diabetic Urine. By Charles T. Jackson, M. D.—*April 6th,* 1834. I received from Dr. M. S. Perry a wine bottle of diabetic urine for examination; and since my analysis he has furnished me with the following account of the case. It is to be regretted that Dr. Perry could not obtain permission to make an examination of the body of the patient after death, as every fact connected with this obscure, and generally fatal disease, is of the greatest value to the profession and the community.

"Perez Hamblin, aged twenty-five, fisherman. I was called to him the 30th of March, 1834; found him 'in articulo mortis.' The imperfect history which I obtained of his case from his wife, is as follows. Three years since, he injured his back by attempting to push a boat from the beach into the water. From this time he complained of acute pain in the region of the kidney. He, however, continued to work for three months without taking medicine. At this time his urine, which had been small in quantity, and of a high colour, began to increase, and become of a straw colour. He now commenced taking Thompson's medicine, under the direction of one of the purchasers of his patent. He grew worse from that time till his death. The pain in his back did not increase, but his urine became more and more abundant, amounting some days to two or three gallons; his appetite for food and drink was voracious; he could not controul it; his flesh wasted, and his strength was diminished. Towards the last of his sickness his tongue was red and dry; skin dry; hands and feet cold; and great difficulty of breathing, but little cough."

With respect to the existence of urea in diabetic urine, I would in the first place remark, that Professor Kane, of Dublin, is the first and only person in Europe who has discovered its presence in conjunction with saccharine matter, and it appears from his analysis, that sugar masks the urea so completely, as to render it extremely difficult to detect and separate. The process of fermentation was, in the following essay, taken advantage of, to convert the sugar into alcohol, and thus free the analysis entirely from this source of embarrassment. Benzoic acid exists in the urine of cows and other herbivorous animals. Scheele states that he had discovered it in the urine of children, but this has been doubted by Berzelius. Proust observes that it may be separated from urine in which it exists, either by evaporation and crystallization, or by distillation.

The bottle of urine furnished me by Dr. Perry, was closely corked and set aside in the laboratory, until I should have leisure to examine it. Other engagements precluded the possibility of making an analysis of it for three weeks, at the end of which time, the bottle was taken, and with the intention of removing a portion for analysis, the cork was started, when it was driven forcibly out by expansion of gas, and rapid effervescence of the urine caused a considerable quantity to escape from the bottle.

The gas being examined by lime water, was found to be carbonic acid. The urine had lost all sweetness to taste, and when a portion was evaporated, no sugar could be obtained. Alcohol was present, as was proved by its odour, and by distillation.

Hence, it appears, that the urine had undergone vinous fermentation; the sugar having changed into alcohol by this process. I thought this a favourable opportunity to ascertain if urea existed in this urine, as the sugar had disappeared by fermentation, and the alcohol produced, had preserved the animal principles from decomposition. For this purpose, I took an ounce of the urine and evaporated it to the consistence of syrup, and then added diluted nitric acid equal in bulk to the syrup. The greater part of the liquid, after a few hours rest, was found converted into crystals of acidulous nitrate of urea, which were separated by the filter. The fluid which passed the filter, was placed aside in the closet to evaporate spontaneously, and being examined the next day, was found to possess the aromatic odour of *benzoic acid*. In attempting to distil off the fluid in hopes of obtaining the acid the whole was rapidly decomposed by the nitric acid with disengagement of nitrogen and nitrous gas. All the urine now remaining was thrown on the filter to separate the sedimentary matter which it abundantly contained. This sediment was of a grayish colour, and when dry became a compact mass. It is difficultly soluble, requiring 10,000 parts of water for solution. It is more soluble in hot water than in cold, and the water when cooling deposits this matter in powder. It reddens litmus paper feebly. When nitric acid is poured upon the substance in powder, it produces a deep lemon yellow colour, and the sediment is dissolved. When this solution is neutralized by carbonate of soda, a precipitate takes place of a yellow colour. From the above characters, we recognise this substance as *xanthic oxide*, a substance exceedingly rare, having been only once found as a calculus by Dr. Marcet, and never before in diabetic urine. The chemical characters and combinations of this substance are but little known, as its rare occurrence has prevented a sufficient quantity from falling into the hands of any chemist. The filtered urine, when evaporated and treated with nitric acid, gave signs of the presence of xanthic oxide. I had several years since, suspected the presence of benzoic acid in diabetic urine, having perceived the odour of it while analyzing the urine of a diabetic patient, in the Massachusetts General Hospital in 1828. The present case gives countenance to the supposition, that it is of frequent occurrence in this disease, and should always be sought for in analysis of the urine. That the case above related, is one of true diabetes mellitus there can be no doubt, from the phenomena which took place in the urine after it was sent me. I have the additional testimony of Dr. Perry, that the urine had a sweet taste, especially when evaporated to the consistence of syrup.—*Medical Magazine, Aug. 15th,* 1834.

Intussusception with Stercoraceous Vomiting, successfully treated by Inflation. By J. Wood, M. D.—Mr. G. aged thirty-five, a type-founder, of nervous temperament, was suddenly seized on the night of September 17th, with violent pains in the umbilical region: has before suffered two slight attacks of rachialgia. A medical gentleman in the neighbourhood saw him, and prescribed purgatives and hot fomentations. My attendance was requested the next night. He had